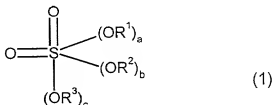


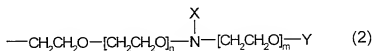
WHAT IS CLAIMED IS:

1. A mixture of sulfuric esters of formula (1)



wherein

- 5 R^1 is an aliphatic radical having 1 to 30 carbon atoms,
 R^2 is a radical of formula (2)



wherein

- 10 n is an integer from 0 to 30,
 m is an integer from 1 to 29,
 X is an aliphatic radical having 4 to 24 carbon atoms, and
 Y is H or $\text{SO}_2(\text{OM})$, where M represents hydrogen, alkali metal, ammonium, mono-, di-, tri-, or tetra($\text{C}_1\text{-C}_8\text{-alkyl}$)ammonium, or mono-, di-, tri-, or tetra($\text{C}_2\text{-C}_8\text{-alkanol}$)ammonium ions,
 15 R^3 is a radical of formula (3)



wherein

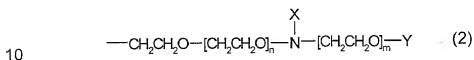
- 20 p is an integer from 4 to 35,
 R^4 is H, methyl, ethyl, phenyl, or mixtures of H and methyl, and
 Z is H, methyl, ethyl, or $\text{SO}_2(\text{OM})$, where M represents hydrogen, alkali metal, ammonium, mono-, di-, tri-, or tetra- ($\text{C}_1\text{-C}_8\text{-alkyl}$)ammonium, or mono-, di-, tri-, or tetra($\text{C}_2\text{-C}_8\text{-alkanol}$)ammonium ions, and

a, b, and c are identical or different and are 0, 1, or 2, with the proviso that
 $a+b+c$ is 2,

obtained by reacting sulfonyl chloride with a mixture of the alcohols R^1OH ,
 R^2OH , and R^3OH , wherein R^1 , R^2 , and R^3 have the same meanings as for

- 5 formula (1) except that Y is exclusively hydrogen and Z is hydrogen,
 methyl, or ethyl.

2. A mixture of sulfuric esters according to Claim 1 wherein
 R^1 is an aliphatic radical having 4 to 30 carbon atoms,
 R^2 is a radical of formula (2)



wherein

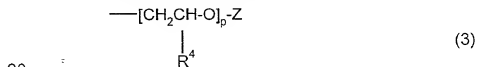
n is an integer from 0 to 10,

m is an integer from 1 to 10,

X is an aliphatic radical having 12 to 24 carbon atoms, and

15 Y is H or $\text{SO}_2(\text{OM})$, where M independently represents
 hydrogen, alkali metal, ammonium, mono-, di-, tri-, or tetra-
 ($\text{C}_1\text{-C}_6\text{-alkyl}$)ammonium, or mono-, di-, tri-, or tetra($\text{C}_2\text{-C}_6\text{-}$
 alkanol)ammonium ions,

R^3 is a radical of formula (3)



wherein

p is an integer from 3 to 35,

R^4 is H or methyl, and

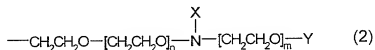
25 Z is H, methyl, ethyl, or $\text{SO}_2(\text{OM})$, where M independently
 represents hydrogen, alkali metal, ammonium, mono-, di-,
 tri-, or tetra($\text{C}_1\text{-C}_6\text{-alkyl}$)ammonium, or mono-, di-, tri-, or
 tetra($\text{C}_2\text{-C}_6\text{-alkanol}$)ammonium ions, and

a, b, and c are identical or different and are 0, 1, or 2, with the proviso that a+b+c is 2.

3. A mixture of sulfuric esters according to Claim 1 wherein

R¹ is an aliphatic radical having 8 to 20 carbon atoms,

5 R² is a radical of formula (2)



wherein

n is an integer from 0 to 5,

m is an integer from 1 to 5,

10 X is an aliphatic radical having 16 to 22 carbon atoms, and

Y is H,

R³ is a radical of formula (3)



wherein

15 p is an integer from 9 to 22,

R¹ is H, and

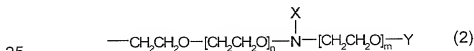
Z is H, and

a, b, and c are identical or different and are 0, 1, or 2 with the proviso that a+b+c is 2.

20. 4. A process for preparing a mixture of sulfuric esters according to Claim 1 comprising reacting sulfonyl chloride with a mixture of the alcohols R¹OH, R²OH, and R³OH, wherein

R¹ is an aliphatic radical having 1 to 30 carbon atoms,

R² is a radical of formula (2)



wherein

n is an integer from 0 to 30,

m is an integer from 1 to 29,

X is an aliphatic radical having 4 to 24 carbon atoms, and

Y is H, and

- 5 R^3 is a radical of formula (3)



wherein

p is an integer from 4 to 35,

R^4 is H, methyl, ethyl, phenyl, or mixtures of H and methyl, and

- 10 Z is H, methyl, or ethyl.

5. A process according to Claim 4 wherein 3 mol of the mixture of the alcohols $R^1\text{OH}$, $R^2\text{OH}$, and $R^3\text{OH}$ are reacted with 1.5 to 2.5 mol of sulfonyl chloride.

6. A process according to Claim 4 wherein the alcohols $R^1\text{OH}$,

- 15 $R^2\text{OH}$, and $R^3\text{OH}$ are used in the quantity ratios

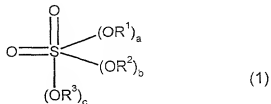
$R^1\text{OH}$ 10 to 40 mol%

$R^2\text{OH}$ 20 to 80 mol%, and

$R^3\text{OH}$ 10 to 40 mol%,

the amounts of the three alcohols totaling 100 mol%.

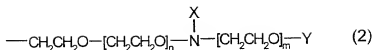
- 20 7. A sulfuric ester of formula (1)



wherein

R^1 is an aliphatic radical having 1 to 30 carbon atoms,

R^2 is a radical of formula (2)



wherein

n is an integer from 0 to 30,

m is an integer from 1 to 29,

5 X is an aliphatic radical having 4 to 24 carbon atoms, and

Y is H or SO₂(OM), where M represents hydrogen, alkali metal, ammonium, mono-, di-, tri-, or tetra(C₁-C₆-alkyl)ammonium, or mono-, di-, tri-, or tetra(C₂-C₆-alkanol)ammonium ions,

R³ is a radical of formula (3)



wherein

p is an integer from 4 to 35,

R⁴ is H, methyl, ethyl, phenyl, or mixtures of H and methyl, and

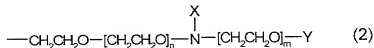
15 Z is H, methyl, ethyl, or SO₂(OM), where M represents hydrogen, alkali metal, ammonium, mono-, di-, tri-, or tetra-(C₁-C₆-alkyl)ammonium, or mono-, di-, tri-, or tetra(C₂-C₆-alkanol)ammonium ions, and

a, b, and c are identical or different and are 0 or 1, with the proviso that a+b+c is 2.

20. 8. A sulfuric ester according to Claim 7 wherein

R¹ is an aliphatic radical having 4 to 30 carbon atoms,

R² is a radical of formula (2)



wherein

25 n is an integer from 0 to 10,

m is an integer from 1 to 10,

X is an aliphatic radical having 12 to 24 carbon atoms, and
 Y is H or SO₂(OM), where M independently represents
 hydrogen, alkali metal, ammonium, mono-, di-, tri-, or
 tetra(C₁-C₆-alkyl)ammonium, or mono-, di-, tri-, or tetra(C₂-C₆-
 5 alkanol)ammonium ions,

R⁵ is a radical of formula (3)



wherein

p is an integer from 3 to 35,

R⁴ is H or methyl, and

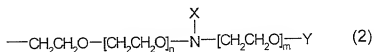
Z is H, methyl, ethyl, or SO₂(OM), where M independently
 represents hydrogen, alkali metal, ammonium, mono-, di-,
 tri-, or tetra(C₁-C₆-alkyl)ammonium, or mono-, di-, tri-, or
 tetra(C₂-C₆-alkanol)ammonium ions, and

a, b, and c are identical or different and are 0 or 1, with the proviso
 that a+b+c is 2.

9. A sulfuric ester according to Claim 7 wherein

R¹ is an aliphatic radical having 8 to 20 carbon atoms,

R² is a radical of formula (2)



wherein

n is an integer from 0 to 5,

m is an integer from 1 to 5,

X is an aliphatic radical having 16 to 22 carbon atoms, and

Y is H,

R³ is a radical of formula (3)



wherein

p is an integer from 9 to 22,

R¹ is H, and

5 Z is H, and

a, b, and c are identical or different and are 0 or 1, with the proviso that a+b+c is 2.

10. An organic or aqueous-organic formulation comprising 25 to 70% by weight of a mixture of sulfuric esters according to Claim 1.

10 11. An organic or aqueous-organic formulation according to Claim 10 wherein the organic component of the formulation comprises one or more organic solvents selected from the group consisting of mono-, di-, and oligoethylene glycols, oligopropylene glycols, and oligoethylene/propylene glycols, and mono- and diethers thereof.

15 12. An organic or aqueous-organic formulation comprising 25 to 70% by weight of a mixture of sulfuric esters according to Claim 7.

13. An organic or aqueous-organic formulation according to Claim 12 wherein the organic component of the formulation comprises one or more organic solvents selected from the group consisting of mono-, di-,
20 and oligoethylene glycols, oligopropylene glycols, and oligoethylene/propylene glycols, and mono- and diethers thereof.

14. A method comprising dyeing nitrogenous fiber materials in the presence of an auxiliary wherein the auxiliary is a sulfuric ester according to Claim 1.

25 15. A method according to Claim 14 wherein the dyeing is carried out with an acid dye, a 1:1 metal complex dye, a 1:2 metal complex dye, a chromium dye, or mixtures thereof.

16. A method comprising dyeing nitrogenous fiber materials in the presence of an auxiliary wherein the auxiliary is a sulfuric ester according to Claim 7.

17. A method according to Claim 16 wherein the dyeing is carried out with an acid dye, a 1:1 metal complex dye, a 1:2 metal complex dye, a chromium dye, or mixtures thereof.

18. A method comprising dyeing nitrogenous fiber materials in the presence of an auxiliary wherein the auxiliary is a formulation according to Claim 10.

19. A method according to Claim 18 wherein the dyeing is carried out with an acid dye, a 1:1 metal complex dye, a 1:2 metal complex dye, a chromium dye, or mixtures thereof.

20. A method comprising dyeing nitrogenous fiber materials in the presence of an auxiliary wherein the auxiliary is a formulation according to Claim 12.

21. A method according to Claim 20 wherein the dyeing is carried out with an acid dye, a 1:1 metal complex dye, a 1:2 metal complex dye, a chromium dye, or mixtures thereof.